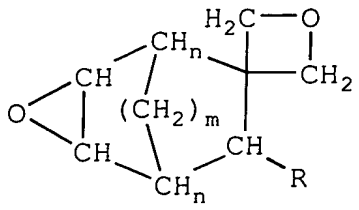
CLAIMS

1. A polymerizable composition comprising (a) an alicyclic alkane having at least one oxetanyl group and at least one epoxy group within the same molecule and (b) a compound capable of initiating cationic polymerization under irradiation of an active energy ray and/or under heat.

2. The polymerizable composition according to claim 1, wherein said compound (b) is a compound capable of generating an acid under irradiation of an active energy ray and/or under heat, and thereby initiating the cationic polymerization.

3. The polymerizable composition according to claim 2, wherein said compound (b) is one or more compound selected from the group consisting of sulfonium salts, iodonium salts and diazonium salts.

4. The polymerizable composition according to claim 1, wherein said alicyclic alkane (a) is a compound represented by formula (1):



(1)

wherein R represents a hydrogen atom or a methyl group, m represents an integer of 0 to 2, and n is 2 when m is 0 and otherwise n is 1.

5. The polymerizable composition according to claim 4, wherein said alicyclic alkane (a) is 7,8-epoxy-2-oxa-5-methylspiro[3.5]nonane.

6. The polymerizable composition according to claim 1, which comprises a compound (c) that can be cationic polymerized by said compound (b), wherein said compound (c) is other than said compound (a).

7. The polymerizable composition according to claim 6, wherein at least one of said compounds (c) is a

compound (c-1) having one or more epoxy group that can be cationic polymerized by said compound (b).

8. The polymerizable composition according to claim 6, wherein at least one of said compounds (c) is a compound (c-2) having one or more oxetanyl group that can be cationic polymerized by said compound (b).

9. The polymerizable composition according to claim 1, wherein said alicyclic alkane (a) is blended in an amount of 5 to 100 mass % based on the total mass of the polymerizable composition minus the mass of said compound (b).

10. The polymerizable composition according to claim 7, wherein said compound (c-1) is blended in an amount of 5 to 95 mass % based on the total mass of the polymerizable composition minus the mass of said compound (b).

11. The polymerizable composition according to claim 8, wherein said compound (c-2) is blended in an amount of 5 to 95 mass % based on the total mass of the polymerizable composition minus the mass of said compound (b).

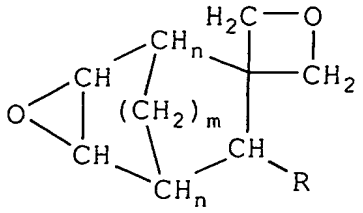
12. A cured material obtained by polymerizing a polymerizable composition comprising (a) an alicyclic alkane having at least one oxetanyl group and at least one epoxy group within the molecule and (b) a compound capable of initiating cationic polymerization under irradiation of an active energy ray and/or under heat.

13. The cured material according to claim 12, wherein said compound (b) is a compound capable of generating an acid under irradiation of an active energy ray and/or under heat, and thereby initiating the cationic polymerization.

14. The cured material according to claim 13, wherein said compound (b) is one or more compound selected from the group consisting of sulfonium salts, iodonium salts and diazonium salts.

15. The cured material according to claim 12,

wherein said alicyclic alkane (a) is a compound represented by formula (1):



(1)

wherein R represents a hydrogen atom or a methyl group, m represents an integer of 0 to 2, and n is 2 when m is 0 and otherwise n is 1.

16. The cured material according to claim 15, wherein said alicyclic alkane (a) is 7,8-epoxy-2-oxa-5-methylspiro[3.5]nonane.

17. The cured material according to claim 16, which comprises a compound (c) that can be cationic polymerized by said compound (b), wherein said compound (c) is other than said compound (a).

18. The cured material according to claim 17, wherein at least one of said compound (c) is a compound (c-1) having one or more epoxy group that can be cationic polymerized by said compound (b).

19. The cured material according to claim 17, wherein at least one of said compound (c) is a compound (c-2) having one or more oxetanyl group that can be cationic polymerized by said compound (b).

20. The cured material according to claim 12, wherein said alicyclic alkane (a) is blended in an amount of 5 to 100 mass% based on the total mass of the polymerizable composition minus the mass of said compound (b).

21. The cured material according to claim 18, wherein said compound (c-1) is blended in an amount of 5 to 95 mass % based on the total mass of the polymerizable composition minus the mass of said compound (b).

22. The cured material according to claim 19, wherein said compound (c-2) is blended in an amount of 5

to 95 mass % based on the total mass of the polymerizable composition minus the mass of said compound (b).

23. A method for manufacturing a cured material from a polymerizable composition comprising (a) an alicyclic alkane having at least one oxetanyl group and at least one epoxy group within the same molecule and (b) a compound capable of initiating cationic polymerization under irradiation of an active energy ray and/or under heat, said method comprising initiating the polymerization under irradiation of an active energy ray and/or under heat.

24. A method for manufacturing the cured material according to any of claims 12 to 22, comprising initiating the polymerization under irradiation of an active energy ray.

25. The method according to claim 24, wherein said active ray is ultraviolet light.

26. A method for manufacturing the cured material according to any of claims 12 to 22, comprising initiating the polymerization under heat.

27. A method for manufacturing the cured material according to any of claims 12 to 22, comprising initiating the polymerization under irradiation of an active energy ray and then heating the composition.

28. The method according to claim 27, wherein said active ray is ultraviolet light.